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## United States Patent [19]

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[54]	METHOD FOR MAKING A WAFER-PAIR HAVING SEALED CHAMBERS
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	438/700; 438/703
[58]	Field of Search

References Cited

U.S. PATENT DOCUMENTS

4,701,424 10/1987 Mikkor ...... 438/455

Attorne
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5,366,587	11/1994	Ueda et al 216/10	)1
		Ko 361/283	
5,585,311	12/1996	Ko 438/5	3
5,851,631	12/1998	Borden et al 428/15	6

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**ABSTRACT** 

A method for fabricating a wafer-pair having at least one recess in one wafer and the recess formed into a chamber with the attaching of the other wafer which has a port plugged with a deposited layer on its external surface. The deposition of the layer may be performed in a very low pressure environment, thus assuring the same kind of environment in the sealed chamber. The chamber may enclose at least one device such as a thermoelectric sensor, bolometer, emitter or other kind of device. The wafer-pair typically will have numerous chambers, with devices, respectively, and may be divided into a multiplicity of chips.

## 24 Claims, 4 Drawing Sheets

